3301 C Street | Suite 400 | Sacramento, CA 95816 | P (916) 444-6666 | F (916) 444-8373
trinityconsultants.com

Trinity Consultants

October 15, 2018

Engineering Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

RE: *Major Facility Review Application for Schnitzer Steel Industries, Inc. Oakland Facility (Plant No. 208)*

To whom it may concern:

On behalf of Schnitzer Steel Industries, Inc. (Schnitzer Steel), Trinity Consultants (Trinity) is submitting this application for a Major Facility Review (MFR) application for Schnitzer Steel's Oakland facility (the Facility). The Facility currently operates under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) as Plant No. 208.

The enclosed application contains a regulatory discussion, the required BAAQMD forms (Appendix A), emission calculations (Appendix B), and a CAM applicability analysis (Appendix C). A check in the amount of $4,480 is included with the application.[1] Schnitzer Steel will pay any additional fees invoiced by BAAQMD for the actual costs associated with processing the application.

Should you have any questions or require additional information related to this submittal, please contact me at (916) 273-5127.

Sincerely,

Jeffrey Adkins
Trinity Consultants Inc.

cc: Scott Sloan, Schnitzer Steel
Pamela Gray, Schnitzer Steel

[1] Per BAAQMD Regulation 3-333 and Schedule P, MFR application fees for an initial MFR permit include an MFR filing fee of $1,120 and an initial permit fee of $1,120 per source. $1,120 + ($1,120*3) = $4,480.

MAJOR FACILITY REVIEW PERMIT APPLICATION

Schnitzer Steel Industries > Oakland, CA

Schnitzer

Bay Area Air Quality Management District
Major Facility Review Permit Application

TRINITY CONSULTANTS
3301 C Street, Suite 400
Sacramento, CA 95816

(916) 444-6666

October 2018

Project 180506.0047

Trinity Consultants

Environmental solutions delivered uncommonly well

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Schnitzer Steel Industries, Inc. (Schnitzer Steel) owns and operates a metal recycling facility in Oakland, California (the Facility), within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The Facility currently operates under a Permit to Operate (PTO) issued by BAAQMD under Facility ID #208.

Schnitzer Steel has recently installed an upgraded particulate emission control system for the shredder at the Facility. Due to the significant improvement in the capture efficiency of the upgraded system, emissions that were previously released as fugitive emissions are now being captured, resulting in higher control system influent concentrations and stack emissions. As required by Condition 26401 Part 4 of the Authority to Construct (ATC) for the new particulate emission control system, Schnitzer Steel has conducted a series of emission source tests to determine the emission rates for precursor organic compounds (POCs), particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$), and various hazardous air pollutants (HAPs).[1] Based on the emission source test results, Schnitzer Steel has determined that the potential to emit (PTE) for POC emissions from the Facility exceeds 100 tpy. Consequently, per BAAQMD Rule 2-6-212 the Facility is a "major facility" that is required to apply for a Major Facility Review (MFR) operating permit.

Pursuant to the BAAQMD Rule 2-6-404.1, Schnitzer Steel is required to submit an MFR permit application within 12 months after the Facility becomes subject to BAAQMD Rule 2-6-403 (the Application). Based on the monthly shredder throughput rate and the POC emission rate, as determined through source tests conducted after completion of the new shredder enclosure and installation of the new emission control system, the Facility became a major facility in December 2017. Therefore, Schnitzer Steel is required to submit a complete Title V permit application by December 1, 2018.[2] Section 1.2 summarizes the required content to be included in the Application per BAAQMD Rules 2-1-202 and 2-6-405.

1.1. FACILITY OVERVIEW

The Facility receives recyclable material comprised of heavy iron, auto bodies, appliances, and other light iron products by both rail and truck at the main commercial entrances where it is inspected and sorted. Shredder feedstock is stockpiled near the shredder and placed by grapple onto an infeed conveyor (S-7) that carries the material into the shredder (S-6). The shredder and infeed conveyor are each abated by water sprays (A-6). The shredder is also abated by venturi scrubbers (A-11 and A-12). Magnetized drums located downstream from the shredder attract ferrous materials separating them from non-ferrous materials. The remaining intermediate non-ferrous stream is known as non-ferrous raw (NFR) material, and consists of both non-ferrous metal and non-metallic materials. The NFR is transferred to the Joint Products Plant (JPP) where non-ferrous metal is further sorted by metal type from non-metallic materials. Non-metallic residue from the JPP is chemically stabilized and shipped offsite for use as alternate daily landfill cover.

In addition to bulk scrap metal, recyclable material consisting of non-bulk ferrous and non-ferrous metal scrap is also received at the Facility at the Peddler Gate. Material received at the Peddler Gate is inspected, weighed, sorted, and segregated by hand into bins by scrap type. After separation, materials are baled at the non-ferrous recovery building and/or stored in cargo containers for transport by truck offsite.

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[1] ATC for Permit Application No. 27762, Plant No. 208, issued by the BAAQMD on 11/10/2016.

[2] Application deadline confirmed by Ms. Carol Allen at the BAAQMD during a conference call on 7/26/2018.

The Facility is a source of air pollutants including PM, PM_{10}, and $PM_{2.5}$, POCs, and HAPs. The Facility is located in an area that is designated as non-attainment for the National Ambient Air Quality Standards (NAAQS) for ozone and $PM_{2.5}$.[3]

1.2. MFR PERMIT APPLICATION REQUIREMENTS

BAAQMD Rule 2-6-405 outlines the requirements for the contents of MFR permit applications and notes that these requirements are in addition to the information required by BAAQMD Rule 2-1-202 (which refers to BAAQMD Rule 2-1-402). The regulatory text from BAAQMD Rule 2-1-402 and Rule 2-6-405 is included in ***italic, bold*** text. This section also includes in plain text Schnitzer Steel's action to meet each requirement.

1.2.1. BAAQMD Rule 2-1-402

402.1 Sufficient information for the APCO to determine the emissions from the sources that are the subject of the application, and to quantify emissions from the sources of any emission reduction credits that will be relied upon as part of the application.

Please refer to Appendix B of this application for the emission calculations for the sources at the Facility. Note that none of the sources will require offsets or emission reduction credits as a result of this MFR application.

402.2 Any information requested by the APCO in order to determine the air quality impact from sources that are the subject of the application.

Schnitzer Steel will promptly provide BAAQMD with any additional information as requested.

402.3 All applicable fees, as described in Regulation 3.

In accordance with BAAQMD Rule 3-333 and Schedule P, a check in the amount of $4,480 will be submitted to BAAQMD with this application.[4] In addition, Schnitzer Steel will pay any additional fees invoiced by BAAQMD as a result of BAAQMD's processing of the Application as appropriate under BAAQMD Regulation 3 (e.g., any discrepancies in the fee amount initially paid, MFR public notice fees, and/or MFR public hearing fees).

402.4 If the application is subject to the New Source Review requirements of Regulation 2, Rule 2, all information required under Section 2-2-401.

Schnitzer Steel is submitting this application for an MFR permit and is not proposing to add any new sources or modify any existing sources at the Facility. As such, this application is not subject to the New Source Review requirements of Regulation 2, Rule 2.

402.5 CEQA-related information that satisfies the requirements of Section 2-1-426.

Schnitzer Steel is not applying for an ATC in this application. Therefore, CEQA-related information is not required.

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[3] Nonattainment Areas for Criteria Pollutants (EPA Green Book), available at: https://www.epa.gov/green-book.

[4] Per BAAQMD Regulation 3-333 and Schedule P, MFR application fees for an initial MFR permit include an MFR filing fee of $1,120 and an initial permit fee of $1,120 per source. $1,120 + ($1,120*3) = $4,480.

402.6 A certification stating whether the source triggers the requirements of Section 2-1-412.

Schnitzer Steel is submitting this application for an MFR permit and is not proposing any new or modified sources with associated emission increases or changes. The MFR Certification Statement provided in Appendix A supports this statement.

402.7 A specific designation of any information contained in the application that the applicant asserts is trade secret pursuant to Section 6254.7 of the Government Code. The applicant shall submit two copies of each page containing trade secret information. One copy shall be clearly labeled "Trade Secret," and each trade secret item shall be clearly marked. The second copy shall be clearly labeled "Public Copy," and each trade secret item shall be redacted. The applicant shall include, for each item which it asserts to be a trade secret, a statement signed by a responsible representative of the applicant identifying that portion of Government Code Section 6254.7(d) upon which the assertion is based and a brief statement setting forth the basis for this assertion.

Schnitzer Steel is requesting BAAQMD to treat the information contained in this application as trade secret. A redacted "Public Copy" of this application will be submitted to the BAAQMD.

402.8 Any other information requested by the APCO as necessary to determine whether the new, modified or altered source will comply with applicable regulatory requirements.

Schnitzer Steel is submitting this application for an MFR permit and is not proposing to add any new sources or modify any existing sources at the Facility. Schnitzer Steel will promptly provide BAAQMD with any additional information as requested.

1.2.2. BAAQMD Rule 2-6-405

405.1 All relevant BAAQMD permit application forms;

Please refer to Appendix A for all applicable BAAQMD permit application forms.

405.2 A description of the facility's processes and products (by Standard Industrial Classification Code) including any associated with an operating scenario identified by the facility;

Please see the Stationary Source Summary form in Appendix A for the source SIC code and Section 1.1 above for further facility descriptions. Schnitzer Steel does not request any new alternative operating scenarios to be identified in the MFR permit.

405.3 A statement certifying that any fee required by District Regulation 3 has been paid;

Please refer to the MFR Certification Statement for in Appendix A which certifies that all fees required by Regulation 3, including Schedule P (e.g., MFR filing fee and MFR initial permit fee), have been paid. In addition, Schnitzer Steel will pay any additional fees invoiced by BAAQMD as a result of BAAQMD's processing of the Application as appropriate under BAAQMD Regulation 3 (e.g., any discrepancies in the fee amount initially paid, MFR public notice fees, and/or MFR public hearing fees).

405.4 Identification and description of:

4.1 each permitted source at the facility

4.2 each source or other activity that is exempt from the requirement to obtain a permit or excluded from District rules or regulations under Regulation 2, Rule 1, and a citation of the section of the rule under which it is exempted or excluded;

Please refer to Appendix A along with the information in this application.

405.5 A list, including citation and description, of all applicable requirements for each source;

Please refer to the MFR Applicable Requirements and Compliance Summary Form in Appendix A for all applicable requirements for each source.

405.6 A calculation and summary of annual emissions (including fugitive emissions) of any regulated or hazardous air pollutant from each source or any emission producing activity if the source is a significant source of an air pollutant as defined by Section 2-6-239. Emission calculations and summaries for pollutants emitted below the significance thresholds are not required for such sources or activities that have emissions of other pollutants above these thresholds. The above emission calculations shall also be submitted for any alternate operating scenarios that are submitted with the application;

Please refer to Appendix B for the annual emission calculations for each emission unit. Schnitzer Steel does not request any alternative operating scenarios with this application.

405.7 A description of the compliance status of the facility with respect to all applicable requirements;

The Certification Statement and Compliance Summary provided in Appendix A includes a certification that the Facility is currently in compliance with all applicable requirements.

405.8 A compliance statement as follows:

8.1 A statement that the facility will continue to comply with all applicable requirements with which it is currently in compliance;

8.2 A statement that the facility will meet all applicable requirements on a timely basis as requirements become effective during the permit term and a narrative of how the facility will achieve compliance with all applicable requirements if the facility is not currently doing so; and

8.3 A copy of any schedule of compliance applicable to the facility's operations regarding air quality which has been issued by the District's Hearing Board, the California Air Resources Board, or any court of competent jurisdiction;

Appendix A contains BAAQMD's Certification Statement form certified by Schnitzer Steel. As stated in the form, Schnitzer Steel will comply with the applicable requirements. Schnitzer Steel will also comply with all applicable requirements as they become effective during the permit term in a timely manner. Finally, no schedule of compliance has been issued by the District's Hearing Board, the California Air Resources Board, or any court of competent jurisdiction.

405.9 A compliance certification by a responsible official of the facility that the application forms and all accompanying reports and other required compliance certifications are true, accurate, and complete based on information and belief formed after reasonable inquiry; and

Appendix A contains BAAQMD's Certification Statement form signed by the responsible official for the Facility. If Schnitzer Steel becomes aware that incorrect or incomplete information has been submitted in this application, Schnitzer Steel will promptly provide BAAQMD with the missing and/or complete information, as available.

405.10 All information required by Volume II of the District's Manual of Procedures.

All information required by Volume II of the District's Manual of Procedures is included in this application. However, Schnitzer Steel will promptly provide BAAQMD with any additional information upon request.

1.3. APPLICATION SHIELD

BAAQMD Rule 2-6-407 states that if a timely and complete initial permit application is submitted, BAAQMD has not acted on the application, and the Facility has responded to all requests from BAAQMD for further information by the required date specified in the request, then the Facility shall not be subject to enforcement for not possessing an MFR permit (i.e., authorization to operate may continue until the MFR permit has been issued or denied by the BAAQMD).

As previously discussed, BAAQMD requires major sources to submit a "timely" application. BAAQMD Rule 2-6-404.1 states that the initial application for an MFR permit must be submitted within 12 months after the facility becomes subject to Regulation 2, Rule 6. Since Schnitzer Steel is submitting this complete MFR application by the December 1, 2018 deadline, Schnitzer Steel understands that the Facility will be protected from enforcement action before an MFR permit is issued.

This MFR permit application is organized as follows:

- Regulatory Applicability – Section 2
- Compliance Assurance Monitoring (CAM) Analysis – Section 3

Based on the information included in this application, Schnitzer Steel believes that this application is timely and complete pursuant to BAAQMD Rule 2-6-404.1 and 2-6-405.

Schnitzer Steel is subject to federal, state, and local air regulations. This section of the application summarizes the air permitting requirements and the key air quality regulations that apply to the Facility. Note that applicability to certain general provisions is not detailed in this narrative summary.

2.1. NEW SOURCE REVIEW APPLICABILITY

The New Source Review (NSR) permitting program generally requires a source to obtain a permit and undertake other obligations prior to construction of any project at an industrial facility if the proposed project results in an increase in emissions in excess of certain threshold levels. The NSR program is comprised of two elements: nonattainment NSR (NNSR) and Prevention of Significant Deterioration (PSD). The NNSR program potentially applies to new construction or modifications that result in emission increases of a particular pollutant for which the area in which the facility is located is classified as "nonattainment" for that pollutant. The PSD program applies to project increases of those pollutants for which the area the facility is located in is classified as "attainment" or "unclassifiable". Schnitzer Steel will ensure that any future construction or modification activities are evaluated for NSR applicability, as appropriate.

2.2. NEW SOURCE PERFORMANCE STANDARDS

New Source Performance Standards (NSPS) regulations (codified under 40 CFR 60) require new, modified, or reconstructed sources to control emissions to the level achievable by the best demonstrated technology as specified in the applicable provisions. There are no NSPS subparts that apply to the Facility.

2.3. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

National Emission Standards for Hazardous Air Pollutants (NESHAPs) are federal regulations that apply to sources of HAPs. NESHAP subparts codified under 40 CFR 61 are pollutant specific regulations applicable to certain sources of HAPs and NESHAP subparts codified under 40 CFR 63 are source category specific regulations. There are no NESHAPs that apply to the Facility.

2.4. BAAQMD REGULATIONS

In addition to the federal air regulations described above, BAAQMD establishes regulations applicable at the emission unit level and at the facility level.

2.4.1. BAAQMD Regulation 1 - General Provisions and Definitions

Regulation 1 provides definitions and general provisions applicable to other BAAQMD regulations. Schnitzer Steel will operate the Facility in compliance with Regulation 1.

2.4.2. BAAQMD Regulation 2 - Permits

2.4.2.1. BAAQMD Rule 2-6 - Major Facility Review

This rule provides the implementing procedures for the federal operating permit requirements of Title V of the Clean Air Act. As discussed during a meeting with BAAQMD staff and based on recent plant modifications and

source test data, the Facility is now a major facility as defined in this rule.[5] As such, the purpose of this application is to obtain an MFR permit for the Facility.

2.4.3. BAAQMD Regulation 3 - Fees

This regulation sets forth the fees assessed by BAAQMD for submittal of permit applications. As discussed above, a check in the amount of $4,480 will be submitted to BAAQMD with this application pursuant to BAAQMD Rule 3-333 and Schedule P.[6] Schnitzer Steel will also pay any additional fees invoiced by BAAQMD as a result of BAAQMD's processing of the Application as appropriate under BAAQMD Regulation 3.

2.4.4. BAAQMD Regulation 4 - Air Pollution Episode Plan

This regulation applies to sources that emit 100 tons or more per year of pollutants subject to federal or California ambient air quality standards. The Facility will be subject to Regulation 4, and Schnitzer Steel will submit the necessary Stationary Source Curtailment Plan and a Traffic Abatement Plan for approval.

2.4.5. BAAQMD Regulation 6 - Particulate Matter

2.4.5.1. BAAQMD Rule 6-1 - General Requirements

Sections 301 and 302 of this rule limit the discharge any air contaminant, other than uncombined water vapor, which is as dark or darker than No. 1 on the Ringelmann Chart (or ≥20% opacity) for a period or periods aggregating more than three minutes in any one hour. In addition, Section 305 of this rule specifies that the visible particulate emissions cannot cause annoyance to others if emissions cross property boundaries. However, per Section 110.4, metal recycling and shredding operations are exempt from the requirement of this rule. Therefore, the Facility is not subject to the requirements of Rule 6-1.

2.4.5.2. BAAQMD Rule 6-4 - Metal Recycling and Shredding Operations

This rule is applicable to a metal recycling facility with a metal throughput of 1,000 tons or more per rolling 12-month period.[7] Condition #26401 limits the shredder throughput to 720,000 tons of scrap-in per year, well over the applicability standard. Therefore this rule is applicable to the Facility. Per Section 401, this rule requires the development of, and compliance with, an Emissions Minimization Plan (EMP) designed to minimize the fugitive emissions of particulate matter from metal recycling facilities. Schnitzer Steel developed and submitted an EMP which has been approved by the APCO. Schnitzer Steel will continue to operate the Facility in accordance with the approved EMP.[8]

2.4.6. BAAQMD Regulation 7 - Odorous Substances

Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The limitations of this Regulation are not applicable unless and until the APCO receives odor complaints from ten or more complainants within a 90-day period, alleging that a person has caused odors

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[5] BAAQMD and Schnitzer Steel meeting on 6/11/2018.

[6] Per BAAQMD Regulation 3-333 and Schedule P, MFR application fees for an initial MFR permit are an MFR filing fee of $1,120 and an initial permit fee of $1,120 per source. $1,120 + ($1,120*3) = $4,480.

[7] Per Rule 6-4-102

[8] Schnitzer Steel has recently updated and submitted a revised EMP to BAAQMD for approval in August 2018,

perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel or residence. The Facility is subject to the requirements of Regulation 7 although the provisions of the rule have not been triggered.

2.4.7. BAAQMD Regulation 11 - Hazardous Pollutants

Regulation 11 contains a series of rules applicable to various source-specific process and emissions units that have the potential to emit specific HAPs. This regulation also incorporates by reference the specific federal NESHAPs for which enforcement authority has been delegated to the BAAQMD. Metal recycling operations are not a source specifically defined in any rule under Regulation 11. As discussed in Section 2.3, the Facility is not subject to any NESHAPs.

3. COMPLIANCE ASSURANCE MONITORING ANALYSIS

This section presents the basis for the applicability determination for 40 CFR 64, *Compliance Assurance Monitoring.* This section also presents the proposed CAM plan for emission units subject to CAM at the Facility.

3.1. CAM BACKGROUND

The CAM Rule under 40 CFR 64, was written to provide "reasonable assurance" of continuous compliance with emissions limitations or standards in cases where the underlying requirement for an emission unit does not require continuous emissions monitoring and for units that are part of major sources that have Title V operating permits (i.e., MFR permits). In accordance with 40 CFR 64.2(a), CAM applies to a pollutant-specific emissions unit (PSEU) at a major source required to have a Title V permit if the unit satisfies all of the following criteria:

1. The emissions unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or surrogate thereof);
2. The emissions unit uses a control device to achieve compliance with any such emission limitation or standard;
3. The emissions unit has potential pre-control device emissions (i.e., PTE without consideration of emission reductions due to the use of pollution control devices) of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source; and
4. Is not otherwise exempt.

Per 64.1, the following key definitions are necessary to determine applicability (note that 40 CFR 64 defines emissions unit using the definition provided in 40 CFR 70.2):

- An emissions unit is defined as "*any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act.*"
- A control device is defined as "*equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. ... For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming. If an applicable requirement establishes that particular equipment which otherwise meets this definition of a control device does not constitute a control device as applied to a particular pollutant-specific emissions unit, then that definition shall be binding for purposes of this part.*"
- Inherent process equipment is defined as "*equipment that is necessary for the proper or safe functioning of the process, or* material recovery equipment that *the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. ...* "

Note that equipment that meets the definition of inherent process equipment is not considered a control device; as such, any emissions unit with associated inherent process equipment that also controls emissions is not subject to the CAM Rule.

If an emission unit is determined to be subject to CAM, pursuant to 40 CFR 64.3, Schnitzer Steel is required to design monitoring to obtain data for one or more indicators of emission-control performance for the control device. Further, pursuant to 40 CFR 64.4, the monitoring as required by 40 CFR 64.3 is required to be summarized in a CAM plan, and the CAM plan must be submitted as part of the Title V permit application.

3.2. CAM APPLICABILITY ANALYSIS

Permitted emissions units at the Facility were first evaluated on a pollutant-by-pollutant basis by the following criteria to identify sources requiring further analysis for CAM applicability:

- The emissions unit uses a control device to control emissions of a regulated pollutant (i.e., criteria pollutants or listed HAP).
- The emissions unit is subject to an emission limitation or standard of a regulated air pollutant.

If both criteria are determined to be applicable to an emissions unit for a particular pollutant, and no exemptions were applicable to the emissions unit, then Schnitzer Steel determined the maximum uncontrolled potential emissions for the particular pollutant and emissions unit to determine whether emissions exceed the major source threshold for the particular pollutant. If all of these criteria are met (control device, emission limitation, and emissions exceeding the major source threshold), then the emission unit is subject to CAM.

Please refer to Appendix C which contains a detailed CAM applicability analysis for the emission sources that meet the above criteria. Based on the analysis contained in Appendix C, Schnitzer Steel determined that the emission units at the facility are not subject to CAM requirements. Only particulate emissions from the silo and shredder are controlled, but uncontrolled particulate emissions from these emission units are well below the major source threshold of 100 tons per year.

APPENDIX A: BAAQMD MFR PERMIT APPLICATION FORMS

Engineering Division
Bay Area Air Quality Management District
375 Beale Street, Ste# 600, San Francisco, CA 94105
415-749-4990

Stationary Source Summary
Page 1

FACILITY NAME: Schnitzer Steel Products Company	FACILITY ID: 208

◆ **DISTRICT USE ONLY** ◆

Application #: _____ **Application Received:** _____

Application Filing Fee: _____ **Application Deemed Complete:** _____

I. FACILITY IDENTIFICATION

1. Facility Name: Schnitzer Steel Products Company	
2. Four digit SIC: 5099	EPA Plant ID:
3. Parent Company (if different than Facility Name):	
4. Mailing Address: PO Box 747, Oakland, CA 94604	
5. Street Address or Source Location: Adeline St, Foot of, Oakland, CA 94607	
6. UTM Coordinates (if required):	
7. Source Located within 50 miles of the state line: ☐ Yes ■ No	
8. Source Located within 1000 feet of a school: ☐ Yes ■ No	
9. Type of Orginzation: ■ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company	
10. Legal Owner's Name: Schnitzer Steel Industries, Inc.	
11. Owner's Agent name (if any):	
12. Responsible Official: Pamela Gray	
13. Plant Site Manager/Contact: Pamela Gray	Telephone #: (510) 839 - 4714
14. Type of Facility: Metal Recycling Facility	
15. General description of processes/prodncts: Scrap metal recovery, shredding and recycling	
16. Is a Federal Risk Management Plan pursuant to Section 112(r) required? ☐ Yes ■ No (If application is submitted after Risk Management Plan due date, attach verification that the plan is registered with the appropriate agency.)	

Engineering Division
Bay Area Air Quality Management District
375 Beale Street, Ste# 600, San Francisco, CA 94105
415-749-4990

Stationary Source Summary
Page 2

FACILITY NAME: Schnitzer Steel Products Company	FACILITY ID: 208

II. TYPE OF PERMIT ACTION

	CURRENT PERMIT (permit number)	EXPIRATION (date)
☒ Initial Title V Application		
☐ Permit Renewal		
☐ Significant Permit Modification		
☐ Minor Permit Modification		
☐ Administrative Amendment		

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action requested involve:
☐ Temporary Source ☐ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ CEM's ☐ Abatement Devices
☐ Source Subject to MACT Requirements [Section 112]
☐ Source Subject to Enhanced Monitoring

2. Is source operating under a Compliance Schedule? ☐ Yes ☒ No

3. For permit modification, provide a general description of the proposed permit modification:

Signature of Responsible Official

Regional Environmental Manager
Title of Responsible Official and Company Name

Pamela Gray
Print Name of Responsible Official

Date: 10/15/18

Permit Services Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600, San Francisco, CA 94105 • 415-749-4990

Major Facility Review
Certification Statement

FACILITY NAME Schnitzer Steel Products Company FACILITY # 208

STATEMENT OF COMPLIANCE:

I certify the following:

Read each statement carefully and initial each box for confirmation.

☑ ***Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form that is(are) in compliance will continue to comply with the applicable requirement(s);***

☑ ***Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form will comply with future-effective applicable requirement(s), on a timely basis;***

☑ ***Based on information and belief formed after reasonable inquiry, information on application forms, all accompanying reports, and other required certifications is true, accurate, and complete;***

☑ ***All fees required by Regulation 3, including Schedule P have been paid.***

STATEMENT OF NON-COMPLIANCE

Read statement carefully. Initial box for confirmation if statement is true.

I certify the following:

☑ ***Based on information and belief formed after reasonable inquiry, the source(s) identified in the Schedule of Compliance application form that is(are) not in compliance with the applicable requirement(s) will comply in accordance with the attached compliance plan schedule.***

Pamela Gray
Signature of Responsible Official

10/15/18
Date

Pamela Gray
Name of Responsible Official

H:\pub_data\TitleV\dataform\mfrform\T5-form\cert.doc

Engineering Division
Bay Area Air Quality Management District
375 Beale Street, Ste# 600, San Francisco, CA 94105
415-749-4990

Total Stationary Source Emissions

FACILITY NAME:	Schnitzer Steel Products Company	FACILITY #:	208

I. STATIONARY SOURCE EMISSIONS

POLLUTANT (name)	EMISSIONS (tons per year)	PRE-MODIFICATION EMISSIONS (tons per year)	EMISSIONS CHANGE (tons per year)
POC	198		
PM	3.8		
PM10	3.8		
PM2.5	3.8		
Benzene	1.1		
Cr (VI)	0.001 (shredder)		
PCBs	0.06		
Cadmium	0.001		
Lead	0.005		
Tetrachloroethylene	0.04		
Trichloroethylene	0.2		
Manganese	4.50E-07		
Nickel	1.61E-07		
Arsenic	1.63E-08		
Beryllium	1.87E-09		
Total Chromium	1.12E-07 (silo)		
Chlorine	1.54		

I certify that based on information and belief formed after reasonable inquiry, the answers, statements, and information contained in this application (and supplemental attachments hereto) are true, accurate, and complete. This application consists of the application forms provided by the Bay Area Air Quality Management District and supplemental attachments. I also certify that I am the responsible official as defined in District Regulation 2, Rule 6.

Signature of Responsible Official

Pamela Gray
Print Name of Responsible Official

Regional Environmental Manager-West
Title of Responsible Official and Company Name

Date: 10/15/18

Permit Services Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600, San Francisco, CA 94105 • 415-749-4990

Major Facility Review Detailed Emissions Report

FACILITY NAME:	Schnitzer Steel Products Company	FACILITY #:	208

LIST OF EQUIPMENT WITH ANNUAL EMISSIONS

In numerical order, list all equipment and/or operations described in Section 2-6-405.6 and their annual emissions in tons per year. Use one line for each pollutant. If more space is required, use additional forms. Please type or print legibly. If sources or activities do not have a source number, leave the Source # column blank. Please attach emission calculations to this form or as an appendix to the application. District calculations may be used if the permittee finds that they are correct. One sample calculation for a group of identical sources is sufficient.

Source #	Name or Description	Type of Pollutant (one line for each)	Annual Emissions, tons per year
6,7	Shredder and Infeed Conveyor	POC	198
6,7	Shredder and Infeed Conveyor	PM	3.8
6,7	Shredder and Infeed Conveyor	PM10	3.8
6,7	Shredder and Infeed Conveyor	PM2.5	3.8
6,7	Shredder and Infeed Conveyor	Benzene	1.1
6,7	Shredder and Infeed Conveyor	Cr(VI)	0.001
6,7	Shredder and Infeed Conveyor	PCBs	0.1
6,7	Shredder and Infeed Conveyor	Cadmium	0.001
6,7	Shredder and Infeed Conveyor	Lead	0.005
6,7	Shredder and Infeed Conveyor	Tetrachloroethylene	0.04
6,7	Shredder and Infeed Conveyor	Trichloroethylene	0.02
10	Cement Silo	PM	0.04
10	Cement Silo	PM10	0.01
10	Cement Silo	PM2.5	0.002
10	Cement Silo	Cr(VI)	1.59E-08
10	Cement Silo	Lead	4.19E-08
10	Cement Silo	Manganese	4.50E-07
10	Cement Silo	Nickel	1.61E-07
10	Cement Silo	Arsenic	1.63E-08

10/15/2018
Date

Emissions for year ending 2017

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Major Facility Review Detailed Emissions Report

FACILITY NAME:	Schnitzer Steel Products Company	FACILITY #:	208

LIST OF EQUIPMENT WITH ANNUAL EMISSIONS

In numerical order, list all equipment and/or operations described in Section 2-6-405.6 and their annual emissions in tons per year. Use one line for each pollutant. If more space is required, use additional forms. Please type or print legibly. If sources or activities do not have a source number, leave the Source # column blank. Please attach emission calculations to this form or as an appendix to the application. District calculations may be used if the permittee finds that they are correct. One sample calculation for a group of identical sources is sufficient.

Source #	Name or Description	Type of Pollutant (one line for each)	Annual Emissions, tons per year
10	Cement Silo	Beryllium	1.87E-09
10	Cement Silo	Total Chromium	1.12E-07
10	Cement Silo	Chlorine	1.54

10/15/2018
Date

Emissions for year ending 2017

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Engineering Division
Bay Area Air Quality Management District
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• (415) 749-4990

Major Facility Review
Abatement Devices

FACILITY NAME: Schnitzer Steel Products Company **FACILITY #:** 208

LIST OF ABATEMENT DEVICES

In numerical order, list all abatement devices, the name or description, and the sources or operation abated. If more space is required, use additional forms. Please type or print legibly.

Device #	Name or Description	Sources or Operation Abated
A6	Water Spray System	S-6, S-7
A-11	Venturi Scrubber	S-6, S-7
A-12	Venturi Scrubber	S-6, S-7
A-10	Pulse Jet Baghouse	S-10

10/15/2018

Date

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Engineering Division
Bay Area Air Quality Management District
375 Beale Street, Ste# 600, San Francisco, CA 94105
415-749-4990

Major Facility Review
Exempt Source List

FACILITY NAME:	Schnitzer Steel Products Company	FACILITY #:	208

LIST OF EQUIPMENT EXEMPT FROM DISTRICT PERMIT REQUIREMENTS

In numerical order, list all equipment which is exempt from District permit requirements. Cite relevant Section of Rule 2-1 for basis for exemption. Please note that emissions must be below 5 tons per year of any regulated pollutant for each source. If more space is required, use additional forms. Please type or print legibly. In the "Emissions Report" column, state whether emissions are listed in the detailed Emissions Report.

SOURCE # (if any)	SOURCE DESCRIPTION (or name)	BASIS FOR EXEMPTION	EMISSIONS REPORTED (Y/N)
11	Joint Products Plants with Enclosure	Rule 2-1-115	N
12	Drum Magnet Line with Enclosure	Rule 2-1-115	N

10/15/2018

Date

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Permit Services Division
Bay Area Air Quality Management District
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Major Facility Review Compliance Certification Schedule

FACILITY NAME:	Schnitzer Steel Products Company	FACILITY #:	208

In numerical order, list all sources that have federally enforceable requirements for compliance certification on a more frequent basis than once per year.

Source #	Applicable Requirement	Frequency
N/A	N/A	N/A

I certify that compliance certifications will be submitted for the above sources on the stated schedule. I also certify that compliance certifications will be submitted for all other sources on an annual basis.

10/15/2018
Date

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Major Facility Review
Applicable Requirements & Compliance Summary

FACILITY NAME: Schnitzer Steel Products Company **FACILITY #:** 208

Source #(s): **Source Name(s)** Facility

APPLICABLE REQUIREMENTS

In numerical order, list all equipment with any applicable requirements. Include any work practice standards or throughput limits pursuant to NSR or District Regulations. Indicate the date during the permit term that the applicable requirement(s) will be effective. If more lines are required, please use additional forms. If information does not fit in the space allotted, attach documentation and reference it on this form. Use the "FE" column to state whether the requirement is federally enforceable. Type or print legibly.

APPLICABLE REGULATIONS	FE	TEST METHODS (if any)	MONITORING PROTOCOL	REPORTING PROTOCOL	RECORDKEEPING PROTOCOL	COMPLIANCE (Y, N)	FUTURE EFFECTIVE DATE
Regulation 1-301	N	N/A	District Inspection	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
Regulation 1-431	Y	N/A	N/A	Breakdown Notification	Rule 2-6-501	Y	N/A
Regulation 1-432	Y	N/A	N/A	Breakdown Report	Rule 2-6-501	Y	N/A
Rule 2-6-404.2	Y	N/A	N/A	Renewal Application	Rule 2-6-501	Y	N/A
Rule 2-6-426	N	N/A	N/A	Annual Compliance Certification Rule 2-6-502	Rule 2-6-501	Y	N/A
Rule 2-6-501	Y	N/A	N/A	NA	N/A	Y	N/A
Rule 2-6-502	Y	N/A	N/A	Deviation Reports; Semi-Annual Monitoring Reports	Rule 2-6-501	Y	N/A
Rule 2-6-503	N	N/A	As required by the District	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
Rule 4-301	Y	N/A	N/A	Submit a Stationary Source Curtailment Plan and a Traffic Abatement Plan	NA	Y	N/A

October 15, 2018
Date

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Bay Area Air Quality Management District
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Major Facility Review
Applicable Requirements & Compliance Summary

FACILITY NAME: Schnitzer Steel Products Company **FACILITY #:** 208

Source #(s): **Source Name(s)** Facility

APPLICABLE REQUIREMENTS

In numerical order, list all equipment with any applicable requirements. Include any work practice standards or throughput limits pursuant to NSR or District Regulations. Indicate the date during the permit term that the applicable requirement(s) will be effective. If more lines are required, please use additional forms. If information does not fit in the space allotted, attach documentation and reference it on this form. Use the "FE" column to state whether the requirement is federally enforceable. Type or print legibly.

APPLICABLE REGULATIONS	FE	TEST METHODS (if any)	MONITORING PROTOCOL	REPORTING PROTOCOL	RECORDKEEPING PROTOCOL	COMPLIANCE (Y, N)	FUTURE EFFECTIVE DATE
Rule 6-4-401	N	N/A	N/A	Rule 6-4-404 Rule 6-4-405 Rule 6-4-408 Rule 6-4-409	Rule 6-4-501 Rule 6-4-502	Y	N/A
Rule 6-4-402	N	N/A	N/A	Rule 6-4-404 Rule 6-4-405 Rule 6-4-408 Rule 6-4-409	Rule 6-4-501 Rule 6-4-502	Y	N/A
Rule 6-4-403	N	N/A	N/A	Rule 6-4-404 Rule 6-4-405 Rule 6-4-408 Rule 6-4-409	Rule 6-4-501 Rule 6-4-502	Y	N/A
Rule 6-4-404	N	N/A	N/A	Rule 6-4-405 Rule 6-4-408 Rule 6-4-409	Rule 6-4-501 Rule 6-4-502	Y	N/A
Rule 6-4-405	N	N/A	N/A	Rule 6-4-408 Rule 6-4-409	Rule 6-4-501 Rule 6-4-502	Y	N/A

October 15, 2018
Date

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Major Facility Review
Applicable Requirements & Compliance Summary

FACILITY NAME: Schnitzer Steel Products Company **FACILITY #:** 208

Source #(s): **Source Name(s)** Facility

APPLICABLE REQUIREMENTS

In numerical order, list all equipment with any applicable requirements. Include any work practice standards or throughput limits pursuant to NSR or District Regulations. Indicate the date during the permit term that the applicable requirement(s) will be effective. If more lines are required, please use additional forms. If information does not fit in the space allotted, attach documentation and reference it on this form. Use the "FE" column to state whether the requirement is federally enforceable. Type or print legibly.

APPLICABLE REGULATIONS	FE	TEST METHODS (if any)	MONITORING PROTOCOL	REPORTING PROTOCOL	RECORDKEEPING PROTOCOL	COMPLIANCE (Y, N)	FUTURE EFFECTIVE DATE
Rule 6-4-406	N	N/A	N/A	Designation of confidential material with justification and "public copy"	Rule 6-4-501	Y	N/A
Rule 6-4-407	N	N/A	N/A	Rule 6-4-404, 405 Rule 6-4-408, 409	Rule 6-4-501 Rule 6-4-502	Y	N/A
Rule 6-4-408	N	N/A	N/A	5-year review of the EMP	Rule 6-4-501 Rule 6-4-502	Y	N/A
Rule 6-4-409	N	N/A	N/A	Modification of the EMP	Rule 6-4-501 Rule 6-4-502	Y	N/A
Rule 6-4-501	N	N/A	N/A	N/A	Maintain records for 5 years	Y	N/A
Rule 6-4-502	N	N/A	N/A	N/A	Maintain records for 12 months to 5 years.	Y	N/A
Regulation 7-301	N	Manual of Procedures, Volume IV; Sections 7-402 to 405	N/A	N/A	N/A	Y	N/A
Regulation 7-302	N	Manual of Procedures, Volume IV; Sections 7-402 to 405	N/A	N/A	N/A	Y	N/A

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Date

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Major Facility Review
Applicable Requirements & Compliance Summary

FACILITY NAME: Schnitzer Steel Products Company **FACILITY #:** 208

Source #(s): S-6 and S-7 **Source Name(s)** Shredder and Infeed Conveyor

APPLICABLE REQUIREMENTS

In numerical order, list all equipment with any applicable requirements. Include any work practice standards or throughput limits pursuant to NSR or District Regulations. Indicate the date during the permit term that the applicable requirement(s) will be effective. If more lines are required, please use additional forms. If information does not fit in the space allotted, attach documentation and reference it on this form. Use the "FE" column to state whether the requirement is federally enforceable. Type or print legibly.

APPLICABLE REGULATIONS	FE	TEST METHODS (if any)	MONITORING PROTOCOL	REPORTING PROTOCOL	RECORDKEEPING PROTOCOL	COMPLIANCE (Y, N)	FUTURE EFFECTIVE DATE
BAAQMD PTO Condition #26401, Part 1; Rule 2-5-302	N	N/A	N/A	Rule 2-6-502; Rule 2-6-426	Rule 6-4-501; Rule 6-4-502; BAAQMD PTO Condition #26401, Part 9	Y	N/A
BAAQMD PTO Condition #26401, Part 2; Rule 2-5-301	N	N/A	N/A	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
BAAQMD PTO Condition #26401, Part 3; Rule 2-5-302	N	N/A	N/A	BAAQMD PTO Condition #26401, Part 4		Y	N/A
BAAQMD PTO Condition #26401, Part 4; Rule 2-5-302	N	N/A	N/A	Initial source test requirements and proposed emission limits		Y	N/A
BAAQMD PTO Condition #26401, Part 5; Rule 2-5-301; Rule 2-5-302	N	MOP, Volume IV, ST-15, Particulates Sampling	BAAQMD PTO Condition #26401, Part 4	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A

October 15, 2018
Date

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Major Facility Review
Applicable Requirements & Compliance Summary

FACILITY NAME: Schnitzer Steel Products Company **FACILITY #:** 208

Source #(s): S-6 and S-7 **Source Name(s)** Shredder and Infeed Conveyor

APPLICABLE REQUIREMENTS

In numerical order, list all equipment with any applicable requirements. Include any work practice standards or throughput limits pursuant to NSR or District Regulations. Indicate the date during the permit term that the applicable requirement(s) will be effective. If more lines are required, please use additional forms. If information does not fit in the space allotted, attach documentation and reference it on this form. Use the "FE" column to state whether the requirement is federally enforceable. Type or print legibly.

APPLICABLE REGULATIONS	FE	TEST METHODS (if any)	MONITORING PROTOCOL	REPORTING PROTOCOL	RECORDKEEPING PROTOCOL	COMPLIANCE (Y, N)	FUTURE EFFECTIVE DATE
BAAQMD PTO Condition #26401, Part 6; Rule 1-301	N	MOP, Volume I, Evaluation of Visible Emissions	District Inspection	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
BAAQMD PTO Condition #26401, Part 7 Rule 1-301; Rule 6-4-301	N	N/A	Emission Minimization Plan (EMP)	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
BAAQMD PTO Condition #26401, Part 8	N	N/A	N/A	Rule 2-6-502; Rule 2-6-426	BAAQMD PTO Condition #26401, Part 9	Y	N/A
BAAQMD PTO Condition #26401, Part 9; Rule 2-5-302	N	N/A	N/A	Rule 2-6-502; Rule 2-6-426	Maintain records for at least 24 months	Y	N/A
SIP 6-301	Y	MOP, Volume I, Evaluation of Visible Emissions	District Inspection	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
SIP 6-310	Y	MOP, Volume IV, ST-15, Particulates Sampling	Emission source tests	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A

October 15, 2018
Date

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Major Facility Review
Applicable Requirements & Compliance Summary

FACILITY NAME: Schnitzer Steel Products Company **FACILITY #:** 208

Source #(s): S-10 **Source Name(s)** Cement Silo

APPLICABLE REQUIREMENTS

In numerical order, list all equipment with any applicable requirements. Include any work practice standards or throughput limits pursuant to NSR or District Regulations. Indicate the date during the permit term that the applicable requirement(s) will be effective. If more lines are required, please use additional forms. If information does not fit in the space allotted, attach documentation and reference it on this form. Use the "FE" column to state whether the requirement is federally enforceable. Type or print legibly.

APPLICABLE REGULATIONS	FE	TEST METHODS (if any)	MONITORING PROTOCOL	REPORTING PROTOCOL	RECORDKEEPING PROTOCOL	COMPLIANCE (Y, N)	FUTURE EFFECTIVE DATE
BAAQMD PTO Condition #24125, Part 1 Rule 1-301	N	MOP, Volume I, Evaluation of Visible Emissions	District Inspection	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
BAAQMD PTO Condition #24125, Part 2	N	N/A	N/A	Rule 2-6-502; Rule 2-6-426	BAAQMD PTO Condition #24125, Part 4; Rule 6-4-501	Y	N/A
BAAQMD PTO Condition #24125, Part 3	N	Manufacturer's recommended procedures	N/A	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
BAAQMD PTO Condition #24125, Part 4	N	N/A	N/A	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
SIP 6-301	Y	MOP, Volume I, Evaluation of Visible Emissions	District Inspection	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A
SIP 6-310	Y	MOP, Volume IV, ST-15, Particulates Sampling	Emission source tests	Rule 2-6-502; Rule 2-6-426	Rule 2-6-501	Y	N/A

October 15, 2018
Date

APPENDIX B: EMISSION CALCULATIONS

Table B-1. Emission Calculations for the Shredder and Infeed Conveyor (S-6 and S-7)

Actual Throughput[1] (ton/year) 602,295

Pollutants	Emission Rate[2] (lb/hr)	Emission Factor[3] (lb/ton)	Actual Emissions (ton/year)
POC	263	0.66	198
PM	5.0	0.013	3.76
PM_{10}	5.0	0.013	3.76
$PM_{2.5}$	5.0	0.013	3.76

1. 2017 actual throughput is based on the 7/10/2018 data update form, provided by Schnitzer Steel on 8/10/2018.
2. Emission rates are based on the proposed limits (lb/hr) in the letter submitted to the District on 5/29/2018.
3. Emission factors are based on the proposed limits (lb/hr) and a normalized production rate of 400 ton/hr.

Table B-2. Toxic Emission Calculations for the Shredder and Infeed Conveyor (S-6 and S-7)

Pollutants[1]	Emission Rate[2] (lb/hr)	Emission Factor[3] (lb/ton)	Actual Emissions (ton/year)
Benzene	1.41	3.53E-03	1.06
Cr(VI)	0.0014	3.50E-06	0.001
PCBs	0.076	1.90E-04	0.06
Cadmium	9.2E-04	2.30E-06	0.001
Lead	6.2E-03	1.55E-05	0.005
Tetrachloroethylene	0.049	1.23E-04	0.04
Trichloroethylene	0.29	7.25E-04	0.22

1. List of toxic pollutants are based on Condition #26401 Part 4b, Authority to Construct for Permit Application 27762, Plant #208, issued on 11/10/2016.
2. Emission rates are based on the proposed limits (lb/hr) in the letter submitted to the District on 5/29/2018.
3. Emission factors are based on the proposed limits (lb/hr) and a normalized production rate of 400 ton/hr.

Table B-3. Emission Calculations for the Cement Silo (S-10)

Actual Throughput[1] (tons/year) 7,693

Pollutants	Emission Factor[2] (lb/ton)	Actual Emissions (ton/year)
PM	0.0099	0.04
PM_{10}	0.0016	0.01
$PM_{2.5}$	0.0006	0.002

1. 2017 actual throughput is based on the 7/10/2018 data update form, provided by Schnitzer Steel on 8/10/2018.

2. PM, PM_{10}, and $PM_{2.5}$ emission factors are obtained from EPA AP-42 Table 11.19.2-4, Emission Factors for Product Storage with Fabric Filter Control.

Table B-4. Toxic Emission Calculations for the Cement Silo (S-10)

	HAPs[1]	Emission Factor[2,3] (lb/ton)	Actual Emissions (ton/year)
Cr(VI)	Yes	4.14E-09	1.59E-08
Lead	Yes	1.09E-08	4.19E-08
Manganese	Yes	1.17E-07	4.50E-07
Nickel	Yes	4.18E-08	1.61E-07
Sulfate	No	84.2	3.24E+02
Arsenic	Yes	4.24E-09	1.63E-08
Beryllium	Yes	4.86E-10	1.87E-09
Cadmium	Yes	ND	ND
Total Chromium	Yes	2.90E-08	1.12E-07
Selenium	Yes	ND	ND
Chlorine	Yes	0.4	1.54E+00
Silica	No	ND	ND

1. Per BAAQMD Rule 2-2-215, Hazardous Air Pollutant (HAP) is any pollutant that is listed pursuant to Section 112(b) of the federal Clean Air Act.
2. Emission factors (lb/ton) for the cement silo are based on the BAAQMD Permit Handbook, Chapter 11.5, Cement Silo Filling (with fabric filter).
3. Per BAAQMD permit handbook, data from EPA Region 9 suggests that Chromium(VI) is about 1/7 of Total Chromium.

APPENDIX C: DETAILED CAM APPLICABILITY ANALYSIS

Table C-1. Schnitzer Steel Oakland Facility Detailed CAM Applicability Analysis

Source[1]	Description	Control Device Used?[2]	Control Device #	Pollutant	Federally Enforceable Emission Limit or Standard		Continuous Compliance Determination Method?	Is Limit or Standard post 11/15/90?	Uncontrolled Potential to Emit (PTE)			Subject to CAM?	
					Limit	Reference			PTE (tpy)	Above Major Source Threshold?	Reference	Yes/No	Reason
S-6 and S-7	Shredder and Infeed Conveyor	Yes	A-6, A-11 and A-12	Opacity	Ringelmann No. 1 for < 3 minutes/hr	SIP 6-301	None	Not necessary to evaluate. Pre-control emissions less than major source threshold.	7.2	No	See Table C-2 of this application for detailed emission calculations	No	CAM does not apply per 40 CFR 64.2(a)(3) as the pre-control potential emissions are less than the major source threshold of 100 tpy.
				PM	No emissions from source > 343 mg per dscm (0.15 grains per dscf) of gas volume	SIP 6-310	None						
S-10	Cement Silo	Yes	A-10	Opacity (PM)	Ringelmann No. 1 for < 3 minutes/hr	SIP 6-301	None	Not necessary to evaluate. Pre-control emissions less than major source threshold.	21.7	No	See Table C-2 of this application for detailed emission calculations	No	CAM does not apply per 40 CFR 64.2(a)(3) as the pre-control potential emissions are less than the major source threshold of 100 tpy.

1. Exempt emission units were not evaluated for CAM applicability.

Table C-2: Uncontrolled Potential to Emit (PTE)

Source Number	Unit Description	Maximum Annual Throughput (tpy) [2, 3]	Pollutant	Uncontrolled Emission Factor (lb/ton) [4,5]	Total Uncontrolled PTE (tpy) [6]	Above Major Source Threshold? [7]
S-6 and S-7[1]	Steel Shredder and Infeed Conveyor	720,000	PM	0.020	7.2	No
S-10	Cement Silo	21,900	PM	1.980	21.7	No

1. Sources S-6 and S-7 are controlled and vented together via Stack P-15. As such, the uncontrolled PTE represents emissions from both equipment.
   Note that CAM applicability is not evaluated for POC because the enclosure and venturi scrubbers do not control POC emissions.
2. Maximum annual throughput for S-6 and S-7 per Condition #26401 Part 1 of the PTO issued by the BAAQMD on 9/28/2017.
3. Maximum annual throughput for S-10 per Condition #24125 Part 2 of the of the PTO issued by the BAAQMD on 9/28/2017.
4. Per Table 2 of the submittal letter to the District dated 5/29/2018, the post-project uncontrolled PM emission rate (lb/hr) = 4.4
   Per the equipment description on the PTO, the average throughput of S-6 (tph) = 225
   S-6 and S-7 uncontrolled emission factor (lb/ton) = Post-project uncontrolled PM_{10} emission PTE (lb/hr)/Average throughput of S-6 (tph).
5. Controlled emission factor of the cement silo is based on EPA AP-42 Table 11.19.2-4 for Product Storage with Fabric Filter Control,
   with a collection efficiency (AP-42 Chapter 11.19.2) of 99.5%
6. Total uncontrolled PM PTE (tpy) = Maximum annual throughput (tpy) * Uncontrolled emission factor (lb/ton) / 2000 (lb/ton).
7. Per 40 CFR 70.2, a source is considered major if it directly emits or has the potential to emit 100 tpy or more of any air pollutant subject to regulation.